

Remarks/Arguments

Reconsideration of the above-identified application in view of the present response is respectfully requested. Claims 1-4, 8-11, and 18-28 are pending in the present application. By the present amendment claims 1, 20, 22, and 23 have been amended. Claims 8-11 have been canceled. New claims 29-33 have been added.

Examiner Interview

The Applicant wishes to thank the Examiner for the courtesies extended during the telephone interview of November 14, 2008. Although no agreement was reached, the Examiner stated that the claims needed to further clarify the spatial relationship between the cutting edge and the planar stop surface on the articulating head section of the device, and that such an amendment would possibly overcome the prior art rejections. Since it is believed that the current amendments to the claims are in accordance with the Examiner's position, it is respectfully submitted that the amendment is appropriate and, therefore, should be entered and/or the application should be allowed.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-3, 8-10, and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,788,976 to Dee (hereafter "Dee") in view of U.S. Patent No. 6,309,403 to Minor (hereafter "Minor"). Claims 8-10 have been canceled and, thus, the rejection of claims 8-10 is moot. It is respectfully submitted that amended claim 1 is patentable over the combination of Dee and Minor and is therefore allowable.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). 35 U.S.C. §103 forbids issuance of a patent when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” In making a determination of obviousness under 35 U.S.C. §103(a):

...the scope and contents of the prior art are determined; the differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. Graham v. John Deere, 383 U.S. 1, 17-18, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966).

Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, *there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.* KSR Int’l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1741; 2007 U.S. Lexis 4745; 167 L. Ed. 2d 705; 75 U.S.L.W. 4289 (2007) (emphasis added), *citing In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006).

Also, in KSR Int’l. Co. V. Teleflex, Inc., the U.S. Supreme Court noted that the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and that it was “important to identify a reason that would have prompted a person of

ordinary skill in the relevant field to combine the [prior art] elements in the manner claimed." KSR at 1741.

Amended claim 1 recites an apparatus for cutting bone. The apparatus comprises an elongate member having a central axis and including a tubular portion extending between a proximal end portion and a distal end portion. The distal end portion includes an articulatable head section that has a first end and a second end. The second end terminates with at least one planar stop surface. A cutting edge projects from, and is integrally formed with, the at least one planar stop surface. The planar stop surface limits movement of the cutting edge along the central axis. The head section is articulatable about a pivot axis that extends transverse to the central axis. The apparatus further includes means for articulating the head section relative to the tubular portion.

Dee does not teach or suggest this structure. Dee discloses a scalpel having a universally adjustable blade 16 mounted to a scalpel handle 10 for selected positioning of the blade about an axis Y-Y through an arc shaped range of motion C-C (Figs. 1-2). The blade 16 is held in a chuck 14 by a releasably engageable retaining ring 90 such that the blade can easily be removed for quick substitution with another blade. The Examiner asserts that the lateral surface of the scalpel blade 16 constitutes the planar stop surface of the present invention. This alleged stop surface, however, is not the terminal end of a tubular articulatable head section, as recited in amended claim 1. Rather, the alleged stop surface is a lateral portion of the flat, substantially rectangular blade 16. Accordingly, it is respectfully

submitted that Dee does not teach or suggest the structure recited in amended claim 1.

Minor does not cure the deficiencies of Dee, as the Examiner has not relied upon Minor to teach a cutting edge projecting from a planar stop surface. Regardless, Minor does not teach or suggest any type of cutting edge that projects from, and is integrally formed with, a planar stop surface that constitutes the terminal end of an articulatable head section. Rather, Minor teaches a surgical instrument 10 having movable jaws 127, 128 for manipulating tools during minimally invasive surgery (Figs. 1-2). Since neither Dee nor Minor, taken alone or in combination, teach or suggest an apparatus having a cutting edge projecting from, and integrally formed with, a planar stop surface that constitutes the terminal end of an articulatable head section, it is respectfully submitted that amended claim 1 is patentable over the combination of Dee and Minor and is therefore allowable.

Claims 2-3 depend from claim 1 and are allowable for at least the same reasons as claim 1 and for the specific limitations recited therein.

Amended claim 22 recites an apparatus for cutting bone. The apparatus comprises an elongate member having a central axis and including a tubular portion extending between a proximal end portion and a distal end portion. The distal end portion includes an articulatable head section having a first end and a second end terminating with at least one planar stop surface. A cutting edge is integrally formed with, and extends along a midline of, the at least one planar stop surface. The cutting edge projects a predetermined height from the at least one planar stop surface to cut the bone. The at least one planar stop surface engages the bone after

the bone is cut by the cutting edge to prevent the cutting edge from cutting the bone a depth greater than the predetermined height.

All the above arguments traversing the rejection of claim 1 as being unpatentable over Dee in view of Minor are applied in the exact same manner to respectfully traverse the rejection of claim 22. Thus, in the interest of brevity, replication of these arguments has been omitted. Furthermore, the combination of Dee and Minor does not teach or suggest a cutting edge that is integrally formed with, and extends along a midline of, at least one planar stop surface. As noted, the Examiner asserts that the lateral surface of the scalpel blade 16 constitutes the planar stop surface of the present invention. The edge of the blade 16, however, clearly does not extend along a midline of this lateral surface. Rather, the edge of the blade 16 extends from the end of this lateral surface along the same plane as the lateral surface, i.e., the edge and the lateral surface are not angled relative to one another (see Figs. 1-2).

Moreover, Dee does not teach or suggest that a cutting edge projects a predetermined height from the at least one planar stop surface and that the at least one planar stop surface prevents the cutting edge from cutting bone a depth greater than the predetermined height. First, since the edge of the blade 16 and the lateral surface of the blade extend along the same plane, the edge of the blade does not extend to a height relative to the lateral surface. Second, notwithstanding the positioning of the edge of the blade 16 relative to the lateral surface, there is no teaching or suggestion that the lateral surface limits the cutting depth of the blade to

any particular depth. Accordingly, Dee does not teach or suggest the structure recited in amended claim 22.

Minor does not cure the deficiencies of Dee, as the Examiner has not relied upon Minor to teach a cutting edge of any kind that projects from a planar stop surface. For these reasons, it is respectfully submitted that amended claim 22 is patentable over the combination of Dee and Minor and is therefore allowable.

Claims 20 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Dee in view of Minor further in view of U.S. Patent No. 5,871,204 to Spirer (hereafter "Spirer"). It is respectfully submitted that amended claim 20 is patentable over the combination of Dee, Minor, and Spirer and is therefore allowable.

Amended claim 20 recites an apparatus for cutting bone. The apparatus comprises an elongate member having a central axis and including a tubular portion extending between a proximal end portion and a distal end portion. The distal end portion includes an articulatable head section having a first end and a second end that terminates with at least one planar stop surface. A cutting edge is integrally formed with the at least one stop surface and projects from the at least one planar stop surface a predetermined height. The at least one planar stop surface limits axial movement of said cutting edge along the central axis to the predetermined height.

Because Dee remains the foundation of the rejection of claim 20, the above arguments traversing the rejection of claim 1 as being unpatentable over Dee in view of Minor are applied in the exact same manner to respectfully traverse the rejection

of claim 20. Thus, in the interest of brevity, replication of these arguments has been omitted. Furthermore, as noted, the combination of Dee and Minor does not teach or suggest that a cutting edge projects a predetermined height from at least one planar stop surface and that the at least one planar stop surface prevents the cutting edge from cutting bone a depth greater than the predetermined height

Spirer does cure the deficiencies of Dee and Minor, as Spirer does not teach or suggest a cutting edge or stop surface of any kind. Accordingly, it is respectfully submitted that the combination of Dee, Minor, and Spirer does not teach or suggest the structure of amended claim 20 and, thus, amended claim 20 is patentable over Dee, Minor, and Spirer and is therefore allowable.

Amended claim 23 is an apparatus for cutting bone. The apparatus comprises an elongate member having a central axis and including a tubular portion extending between a proximal end portion and a distal end portion. The distal end portion includes an articulatable head section that has a first end and a second end. The second end terminates with at least one planar stop surface. A cutting edge projects from, and is integrally formed with, the at least one planar stop surface. The planar stop surface engages the cortical bone after the cortical bone is cut by the cutting edge to stop further movement of the head section and prevent the cutting edge from undesirably engaging other tissue or bone. The head section is articulatable about a pivot axis that extends transverse to the central axis. The apparatus further comprises mechanism for pivoting the head section relative to the tubular portion.

Because Dee remains the foundation of the rejection of claim 23, the above arguments traversing the rejection of claim 1 as being unpatentable over Dee in view

of Minor are applied in the exact same manner to respectfully traverse the rejection of claim 23. Thus, in the interest of brevity, replication of these arguments has been omitted. Furthermore, Spirer does cure the deficiencies of Dee and Minor, as Spirer does not teach or suggest a cutting edge or stop surface of any kind. Accordingly, it is respectfully submitted that the combination of Dee, Minor, and Spirer does not teach or suggest the structure of amended claim 23 and, thus, amended claim 23 is patentable over Dee, Minor, and Spirer and is therefore allowable.

Claims 21, 24, and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Dee in view of Minor further in view of Spirer further in view of U.S. Patent No. 5,372,587 Hammerslag. Claims 4, 11, and 26-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Dee in view of Minor further in view of Spirer further in view of Hammerslag further in view of U.S. Patent No. 6,830,574 to Hecke. Claim 4 depends from claim 1 and is allowable for at least the same reasons as claim 1 and for the specific limitations recited therein. Claim 11 has been canceled and, thus, the rejection of claim 11 is moot. Claim 21 depends from claim 20 and is allowable for at least the same reasons as claim 20 and for the specific limitations recited therein. Claims 24-28 depend from claim 23 and are allowable for at least the same reasons as claim 23 and for the specific limitations recited therein.

New Claims

New claims 29 and 33 recite that the cutting edge projects from the at least one planar stop surface a predetermined height, the remainder of the at least one planar stop surface limiting movement of the cutting edge along the central axis to

the predetermined height. It is respectfully submitted that the art of record, taken alone or in combination, does or teach or suggest this structure. Accordingly, it is believed that claims 29 and 33 are patentable over the art of record and therefore allowable.

New claims 30-32 recite that the cutting edge extends along a midline of the at least one planar stop surface. It is respectfully submitted that the art of record, taken alone or in combination, does or teach or suggest this structure. Accordingly, it is believed that claims 30-32 are patentable over the art of record and therefore allowable.

In view of the foregoing, it is respectfully submitted that the above-identified application is in condition for allowance, and allowance of the application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

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